

CLAIMS

1. A receiver apparatus in which an operation of a receiver circuit is started before reception of an assigned signal, and stopped, when the reception of the assigned signal ends, until before reception of a next assigned signal, comprising:

an evaluation unit operable to evaluate a quality of the received assigned signal;

a determination unit operable to determine an operation start time at which the operation of the receiver circuit is to be started for the reception of the next assigned signal, based on a result of the evaluation by the evaluation unit; and

a control unit operable to start the operation of the receiver circuit at the determined operation start time.

2. The receiver apparatus of Claim 1,

wherein the evaluation unit evaluates whether the quality of the received assigned signal is good, and

the determination unit determines the operation start time to be closer to a time at which the reception of the next assigned signal begins, when the quality of the received assigned signal is better.

3. The receiver apparatus of Claim 2,

wherein the evaluation unit sets an evaluation value corresponding to the quality of the received assigned signal, and compares the evaluation value with a predetermined value

to evaluate whether the quality of the received assigned signal is good, and

the determination unit stores information showing a plurality of predetermined times beforehand, and determines, as the operation start time, a predetermined time that is closer to the time at which the reception of the next assigned signal begins when the quality of the received assigned signal is good, and a predetermined time that is farther from the time at which the reception of the next assigned signal begins when the quality of the received assigned signal is not good.

4. The receiver apparatus of Claim 1,

wherein the evaluation unit includes:

an error rate measuring unit operable to measure an error rate of the received assigned signal, and

the evaluation unit performs the evaluation based on the measured error rate.

5. The receiver apparatus of Claim 1,

wherein the evaluation unit includes:

a C/N measuring unit operable to measure a carrier-to-noise ratio of the received assigned signal, and

the evaluation unit performs the evaluation based on the measured carrier-to-noise ratio.

6. The receiver apparatus of Claim 1,

wherein the evaluation unit includes:

a reception input level estimation unit operable to

estimate a reception input level of the received assigned signal, and

the evaluation unit performs the evaluation based on the estimated reception input level.

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7. The receiver apparatus of Claim 1,

wherein the evaluation unit includes:

a channel characteristic estimation unit operable to estimate a channel characteristic of the received assigned signal using pilot carriers contained in the received assigned signal, and

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the evaluation unit performs the evaluation based on the estimated channel characteristic.

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8. The receiver apparatus of Claim 1,

wherein the evaluation unit includes:

an interference signal detection unit operable to detect whether power of each sub-carrier contained in the received assigned signal is larger than a predetermined value, and

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the evaluation unit performs the evaluation based on a result of the detection by the interference signal detection unit.

9. The receiver apparatus of Claim 1, further comprising:

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a pull-in time measuring unit operable to measure a pull-in time necessary for the operation of the receiver circuit to stabilize from when the operation of the receiver circuit is started; and

a holding unit operable to hold information showing at least one pull-in time previously measured by the pull-in time measuring unit,

wherein the evaluation unit performs the evaluation
5 based on the information held in the holding unit.

10. The receiver apparatus of Claim 1, further comprising:

a battery monitoring unit operable to measure a remaining battery level of the receiver apparatus,

10 wherein the control unit starts the operation of the receiver circuit at the determined operation start time if the measured remaining battery level is no less than a predetermined value, and starts the operation of the receiver circuit at a predetermined time if the measured remaining
15 battery level is less than the predetermined value.

11. A signal reception method used in a receiver apparatus in which an operation of a receiver circuit is started before reception of an assigned signal, and stopped, when the
20 reception of the assigned signal ends, until before reception of a next assigned signal, comprising steps of:

evaluating a quality of the received assigned signal;
determining an operation start time at which the operation of the receiver circuit is to be started for the
25 reception of the next assigned signal, based on a result of the evaluation; and

starting the operation of the receiver circuit at the determined operation start time.

12. An integrated circuit for executing a process in which
an operation of a receiver circuit is started before reception
of an assigned signal, and stopped, when the reception of
5 the assigned signal ends, until before reception of a next
assigned signal, comprising:

an evaluation circuit operable to evaluate a quality
of the received assigned signal;

a determination circuit operable to determine an
10 operation start time at which the operation of the receiver
circuit is to be started for the reception of the next assigned
signal, based on a result of the evaluation by the evaluation
circuit; and

a control circuit operable to start the operation of
15 the receiver circuit at the determined operation start time.